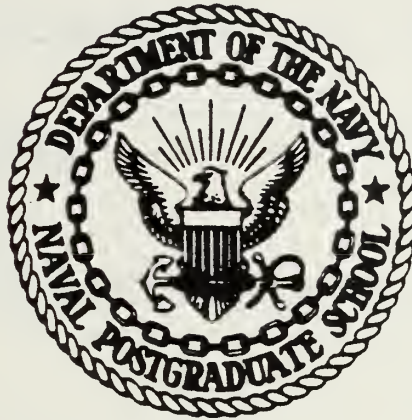


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THESIS

ANALYSIS OF THE CRIMINAL JURY TRIAL SCHEDULING SYSTEM
IN USE AT THE MONTEREY BRANCH OF THE MONTEREY COUNTY,
CALIFORNIA MUNICIPAL COURT

by

Michael James Clark

December 1981

Thesis Advisor:

R. A. Bobulinski

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evaluated for their effect on the court's operation using Monte Carlo simulation and sensitivity analysis. The author recommends that two of the three alternative policies, changing the timing of the readiness conference and establishing a minimum limit on the number of cases to be scheduled in each courtroom, be adopted by the Monterey Branch Municipal Court.

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Analysis of the Criminal Jury Trial Scheduling System in Use at the
Monterey Branch of the Monterey County, California Municipal Court

by

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Captain, United States Army
B.A., Gonzaga University, 1976

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1981

ABSTRACT

This thesis is an analysis of the criminal jury trial scheduling system in use at the Monterey Branch of the Monterey County, California Municipal Court. Inefficiencies in the scheduling system which cause witnesses and jurors to incur additional costs are analyzed to identify areas which can be improved. The analysis covers a six-month period from January 1981 through June 1981. The estimated cost to the witnesses and jurors of the inefficiencies is \$83,519 for the six-month period. The author proposes three alternative policies for a revised scheduling system. The alternative policies are tested and evaluated for their effect on the court's operation using Monte Carlo simulation and sensitivity analysis. The author recommends that two of the three alternative policies, changing the timing of the readiness conference and establishing a minimum limit on the number of cases to be scheduled in each courtroom, be adopted by the Monterey Branch Municipal Court.

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I. INTRODUCTION

A. GENERAL

In the time period from January 1980 to June 1981, the Monterey Branch of the Monterey County, California Municipal Court had approximately 1600 cases scheduled for jury trials. Of these, only 175 jury trials were actually held.¹ Statistics show that in a typical week, upwards of 40 cases could be scheduled for a jury trial. Witnesses for these cases are subpoenaed and must make arrangements to insure they will be free on the day for which the trial is scheduled. However, only three judges are assigned to the Monterey Branch, and each can handle at most two cases per week due to the scheduling of other judicial proceedings and the time requirements of a jury trial (at least one day's time). The effect is that the possibility exists for only six trials to be held out of the 40 scheduled.²

The decision as to which cases will be heard is not made until the afternoon prior to the scheduled jury trial dates. As a result witnesses standing by must be contacted to be informed that they will not be required on the date scheduled. Often, telephone calls are made after normal work hours when witnesses may be unable to reverse the preparations made to appear at the trial. This action can cause a disruption

¹The numbers cited are from data gathered by the author from records maintained at the Monterey Branch Municipal Court.

²This information comes from an interview conducted by the author with Judge William Burleigh, Presiding Judge of the Monterey County Municipal Court.

in the normal lives of witnesses and may often have a monetary impact on them. On an individual basis, the impact may not be great, but when considered in the aggregate, the impact of the scheduling system may be a significant unrecognized cost of administering the judicial system.

B. PROBLEM DEFINITION

The author contends that the situation described above is not due to gross mismanagement of the scheduling system as it may appear to be on the surface. A definite rationale is used by the Presiding Municipal Court Judge, who is responsible for the scheduling. His rationale is that the presiding judge is responsible for insuring that each defendant is given the opportunity for a speedy trial, which is guaranteed by the United States Constitution. With the high number of cases scheduled for jury trial and the limited number of courtrooms, the presiding judge must insure the courtrooms are fully utilized to prevent a backlog of cases developing that might preclude speedy trials.³

As one can see in the figures addressed above, the majority of the cases scheduled for jury trials are disposed of without being heard by a jury. Unfortunately, a literature search indicates that there is no method of identifying these cases prior to scheduling. If the judges scheduled only six cases per week, the courtrooms would be empty most of the time, since 87% of the cases are disposed without being presented to a jury.⁴ Therefore, cases are deliberately overscheduled to insure

³Interview with Judge Burleigh

⁴The percentage is derived from the number of cases for which a jury trial was held divided by the number of cases scheduled.

that a sufficient number of actual jury trial cases will be available to fully utilize the courtrooms.

A management audit conducted by the author revealed however that there is no cutoff established that delineates between an adequate number of cases to insure courtroom utilization and an excessive number of cases. The only current control check is the calendar clerk who is responsible for maintaining the schedule. The clerk requests that trials not be scheduled for a particular week when she feels that the number of cases scheduled for that week has become excessive. Her only guidance is based on past experience, with no specific number or range of numbers used. There also is no plan for a leveling of the workload in the scheduling system resulting in a continuous swing from week to week in the number of cases scheduled.

C. PURPOSE AND OBJECTIVE OF STUDY

The intent of this study is to first identify the problems in the scheduling system used for jury trials, and then to develop viable alternatives to help alleviate these problems. The only statistics developed by the current record keeping system of the Monterey Branch Municipal Court is the amount of time it takes for a case to be disposed. No statistics are developed to determine how efficiently the cases are being handled. The initial focus of this study will therefore be an examination of the efficiency of the current scheduling system used in the Monterey Branch Municipal Court.

Once an evaluation of the current system has been made, the focus will turn to an evaluation of the cost impact of any inefficiency. The cost

analysis will be limited to those resources utilized by the courts that are not specifically dedicated to the operation of the judicial system. A further elaboration of this point will be covered later in this chapter; at this point it is sufficient to say that the cost analysis will deal primarily with the cost impact on the witnesses and jurors.

Finally, alternatives to the present system will be developed to increase the efficiency of the scheduling system. The alternatives will be evaluated for the cost impact they would have on witnesses and jurors. The alternatives will also be evaluated on an effectiveness basis, using the measure to be developed in Chapter III.

The overall objectives of this study are twofold. The first objective is to measure the inefficiencies of the current jury trial scheduling system used by the Monterey Branch of the Monterey County Municipal Court. The author contends that the judges in charge of the scheduling need to be made aware of the inefficiencies in their current scheduling system to alert them to a need for a change in that system. Since their only current measure is an effectiveness measure, their system is geared to that measure. An awareness by the judges of the impact of their scheduling system on the populace is needed to help them understand the need for a balance between efficiency and effectiveness. Along this line, the second objective is to develop some viable alternatives for scheduling the cases that balance efficiency and effectiveness. An old axiom states that one should not criticize unless one has a better way; this study will follow that axiom.

D. ASSUMPTIONS

The costs of administering justice can be traced to two sources, those explicitly allocated to the system and those implicitly used by the system. The explicit costs are those resources allocated to the judicial system through the traditional budgetary process, plus those costs associated with people normally connected to the judicial system in their occupations. Examples of these people are lawyers, police, and the staff of police laboratories. The implicit costs are those resources used by the system that are not specifically recognized by the budgetary process but are nonetheless a necessary cost of the judicial system. Examples of both the explicit and implicit costs are shown in Table I-1.

TABLE I-1
COSTS OF THE JUDICIAL SYSTEM

<u>EXPLICIT</u>	<u>IMPLICIT</u>
Judges' salaries	Witnesses' lost job time
Clerks' salaries	Witnesses' expenses
Police salaries	Jurors' lost job time
Lawyers' fees	Jurors' expenses

This thesis will focus on the implicit costs, and analyze the present system of scheduling jury trials by how efficiently and effectively these resources are utilized. The explicit costs of the system will generally not be used in the analysis of the system. These costs are already recognized in the budgetary process and the people responsible for administering the judicial system are already held accountable for these costs. As stated earlier, one of the problems of the current system is that the implicit costs are not recognized and therefore utilization of these resources is not always efficiently carried out. Therefore, the

costs of the judges, court clerks, bailiffs, and other people whose occupations normally associate them with the court system, will not be used in analyzing the present system and alternatives, except in those cases where an alternative may adversely affect the utilization of the explicit resources.

E. RESEARCH METHODOLOGY

The research behind this thesis was conducted in three phases. In order, they are the collection of data on case flows in the system, the collection and analysis of cost data on the current system, and the development and testing of alternatives with accompanying cost analysis of the alternatives.

Currently in the Monterey Branch Municipal Court, statistical data are gathered only for the purpose of determining the amount of time elapsed between the initiation of a case into the judicial system, and the disposition of that case by the system. These elements are not sufficient to measure the efficiency of the Monterey Branch's scheduling system for jury trials. To support an efficiency measure, it was necessary to collect data directly from the case records kept by the court clerks. The primary data collected were the number of times a case was scheduled for jury trial by the Municipal Court. It was felt by the author that the best measurement of efficiency of the system would be the number of times a case was considered by the Court before disposition; the smaller the number, the more efficient the system.

The second phase was based on responses to questionnaires sent to witnesses and jurors involved in cases in the six-month period from

January 1981 to June 1981. The questionnaire requested that the respondents indicate the amount of on-the-job time lost due to their involvement with the judicial system. The data were used to develop a cost estimate for each time a case was scheduled but not heard. This estimate was used to assess the impact of rescheduling jury trials and in making an overall assessment of the cost effectiveness of the present scheduling system.

The final phase was the development and testing of alternative policies for the scheduling of jury trials. Using the data collected in the first phase, alternatives were tested using Monte Carlo simulation and sensitivity analysis to evaluate their effect on case flows. After the evaluation of the effect on case flows, the alternative policies were analyzed for their cost impact using the cost data developed in the second phase. The alternatives were also compared to the original system, using both the cost analysis and the measure of effectiveness developed by the author.

F. ORGANIZATION OF THE THESIS

The thesis will be organized along the same lines as the research phases. Chapter II will be a brief background description of the judicial system taken as a whole to give perspective to where the Monterey Branch of the Monterey County, California Municipal Court fits into the judicial system. Included also will be a description of the scheduling system for jury trials currently in use in the Monterey Branch Municipal Court.

Chapter III will be an analysis of the case flow characteristics in the Municipal Court with the intent of identifying bottlenecks in the

system. Also, a cost analysis of the present system will be made to assess the impact of the current system, and to give a standard to compare the cost efficiency of alternative systems to be developed later. Finally, a measurement of the effectiveness of the jury trial scheduling system will be made to arrive at an effectiveness standard for use in analyzing the alternatives.

Chapter IV will begin with a discussion of possible alternatives to the present scheduling system and an enumeration of viable alternatives. Following this will be an analysis of the results of the tests of the alternatives to see how the alternatives may alter the case flow within the system. The chapter will conclude with a cost analysis of the alternatives.

Finally, Chapter V will contain the author's recommendations, with the basis for the recommendations given. The chapter will conclude with a listing of areas of possible future study, primarily focusing on areas of efficiency and effectiveness not covered by this thesis.

II. BACKGROUND OF THE MONTEREY BRANCH MUNICIPAL COURT

A. INTRODUCTION

One of the influences on the judicial system in the United States is the United States (U.S.) Constitution. For the Municipal Court in Monterey County, three parts of the U.S. Constitution play an important role in determining the operation and jurisdiction of the Court. This chapter will begin with a brief discussion of those parts and how they impact on the Municipal Court.

Following this discussion, Chapter II will continue with a description of the court system in the state of California and of the courts in Monterey County specifically. The chapter will then conclude with a discussion of the organization of the courts in the Monterey Annex Courthouse and a description of the case flows within the Monterey Branch of the Monterey County Municipal Court.

The information contained in this chapter was taken from three sources. The material on the U.S. Constitution is taken from The Judicial Process by Henry J. Abraham. The material on the California court system is taken from The Courts and the News Media by Dr. Albert G. Pickerell and Michel Lipman. The material on the Monterey County court system is taken from records maintained by the Monterey Branch Municipal Court.

B. U. S. CONSTITUTION'S IMPACT ON THE MUNICIPAL COURT

One of the underlying principles of the U. S. Constitution is the principle of separation of powers between the Federal government and the

individual state governments. This separation of powers has led to a dual system of courts, one at the Federal level and one at each state level. The legal jurisdictions of the courts are separate, the Federal courts having jurisdiction over matters in violation of Federal law and the state courts having jurisdiction over matters in violation of state laws. Though separate, the Federal and state systems have established similar organizations. Both systems have a pyramiding structure, with lower courts having original jurisdiction feeding into a system of higher courts reviewing the work of the lower courts.

The second part of the U. S. Constitution that impacts on the Municipal Court is the right to trial by jury, guaranteed by the Sixth Amendment. Although originally interpreted as applying only to the Federal courts and Federal crimes, in 1968 the U. S. Supreme Court ruled that the Sixth Amendment applied also to state courts. In 1970, the U. S. Supreme Court modified this ruling, making the right to jury trial applicable only in those cases in which the possible punishment involves imprisonment of six months or more. Because of this right to jury trial, the Municipal Court must be prepared to conduct jury trials if requested by a defendant.

The Sixth Amendment to the U. S. Constitution also guarantees the defendant the right to a speedy trial. Lack of a speedy trial is cause for dismissal of charges against a defendant. This requirement places a burden on the operation of the courts and upon the scheduling system used by the courts. Because of the Sixth Amendment's guarantee to a speedy trial, the courts must be operated in such a manner as to avoid lengthy delays which might cause dismissals. It is a concern with

possible lengthy delays that has led to the one measure of efficiency maintained on the California courts; that measure being the time elapsed between arraignment and disposition of charges against a defendant.

C. COURT SYSTEM OF THE STATE OF CALIFORNIA

Like the Federal court system, the courts of California are arranged on three levels of jurisdiction. On the first level are the courts of original or general jurisdiction, that is, those courts in which cases are originally heard and questions of fact are decided. The second level is the Courts of Appeal, which are the state's intermediate appeal courts. The third level is the California Supreme Court, which is the final court of appeal for the State of California.

Within the first level there are three types of courts having original jurisdiction. The lowest court is the Justice Court. This court has original jurisdiction in cases involving misdemeanors which are punishable by not more than a \$1000 fine or a one-year sentence. The Justice Courts also have original jurisdiction in civil cases where the amount in controversy is less than \$1000. Each Justice Court has one judge assigned.

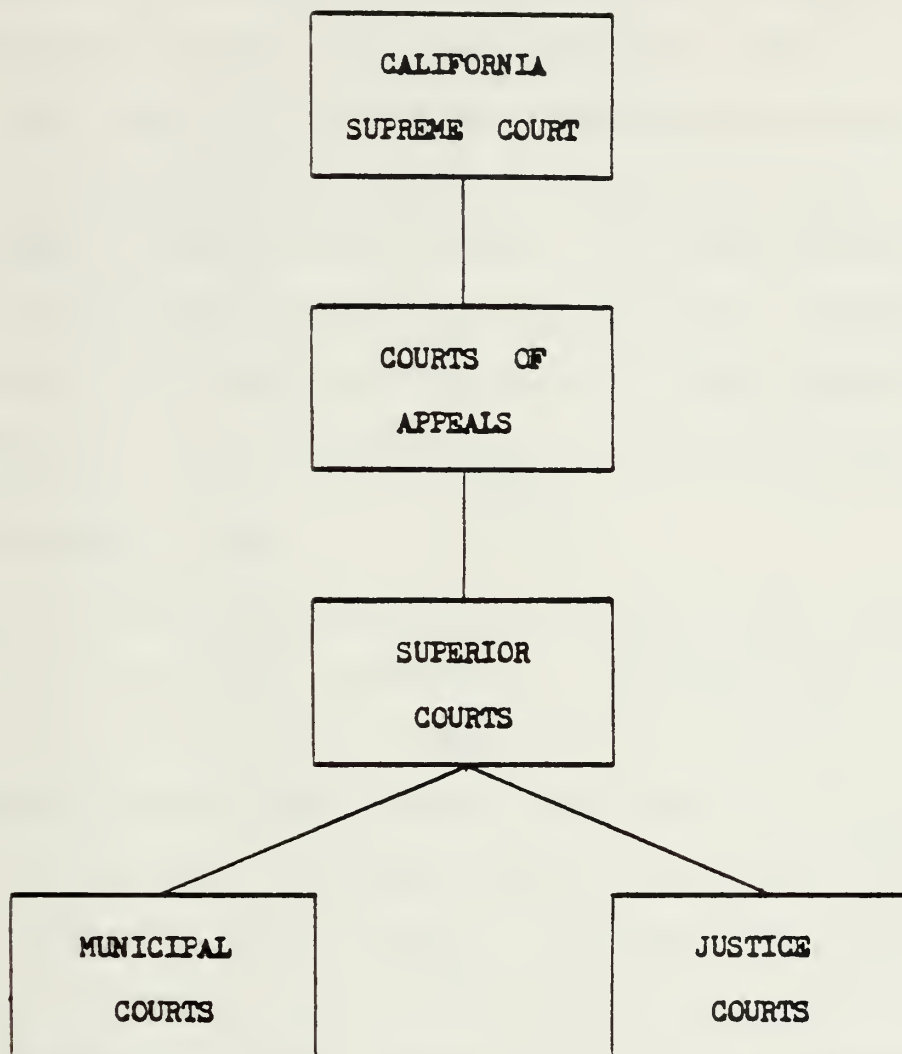
The next type of court having original jurisdiction is the Municipal Court. Municipal Courts have original jurisdiction for all misdemeanors and conduct preliminary hearings in felony cases. The court's civil jurisdiction is limited to those cases in which the amount in dispute is less than \$5000. The number of judges in each Municipal Court is fixed by the California State Legislature, with each court having at least one judge.

The highest court having general jurisdiction is the Superior Court. Superior Courts have unlimited original jurisdiction in all cases, however the Courts primarily exercise jurisdiction over felonies and civil cases involving amounts in excess of \$5000. Additionally, the Superior Courts have jurisdiction over appeals from the Municipal and Justice Courts. The number of judges in each Superior Court is determined on the basis of the population of the area served by the Court.

The California Courts of Appeal have jurisdiction over appeals from the Superior Courts, except in those cases where a sentence of death has been given. There are five Courts of Appeal with each Court having a presiding judge and two or more associate judges. The final level, the California Supreme Court has discretionary appellate jurisdiction to hear cases pending in or decided by the California Courts of Appeal. In those cases in which a judgment of death was pronounced, appeal from the Superior Courts is direct to the California Supreme Court. Figure II-1 shows the relationships of the courts in the State of California.

D. JURISDICTIONAL BOUNDARIES OF THE COURTS

Other than the legal jurisdictions outlined above, a physical jurisdictional boundary is also established for each court. In the courts of original jurisdiction a pyramid structure is used with the Superior Courts at the top of the pyramid and the Municipal and Justice Courts forming the base. The physical jurisdictions of these courts follow this pyramid structure and are organized at the county level of government. Each county in the State of California has one Superior Court, the boundary of that court's physical jurisdiction being identical to the county's boundaries.



CALIFORNIA COURT SYSTEM

FIGURE II-1

The boundaries of the physical jurisdictions of the Municipal and Justice Courts are established by each county's Board of Supervisors. The board divides the county into judicial districts. Those districts having a population of less than 40,000 are designated as Justice Court districts, while those districts having a population in excess of 40,000 are designated as Municipal Court districts. The Counties have a vested interest in the organization of the judicial districts. The costs of the Municipal and Justice Courts are borne by the individual counties, while the Superior Court costs are shared by the state and the counties.

E. MONTEREY COUNTY COURTS

Monterey County, California has been divided into three judicial districts by the county Board of Supervisors. Two of the districts have Justice Courts and the third has a Municipal Court. The two justice court districts are the Southern Justice Court District and the Central Justice Court District. The Southern Justice Court District has one judge with one courtroom, located in King City, California. The Central Justice Court District operates out of two courtrooms, one in Gonzales, California and one in Soledad, California, however the District is assigned only one judge.

The third district, the Monterey County Municipal Court District, is divided into three branches located in Salinas, Monterey and Castroville, California. The Salinas Branch has four judges assigned, and the Monterey Branch has three judges. The Castroville Branch has no assigned judge, acting only as a depository for filing of cases for the Salinas Branch. Figure II-2 shows the judicial districts of Monterey County and the locations of the courts and branches.



- I. MONTEREY COUNTY MUNICIPAL COURT DISTRICT
- II. CENTRAL JUSTICE COURT DISTRICT
- III. SOUTHERN JUSTICE COURT DISTRICT

MONTEREY COUNTY JUDICIAL DISTRICTS

(SOURCE: MONTEREY BRANCH MUNICIPAL COURT RECORDS)

FIGURE II-2

The Monterey Branch of the Monterey County Municipal Court is located in the Monterey Annex Courthouse in Monterey, California. Five courtrooms operate inside the courthouse. Three of the courtrooms are occupied by the three Municipal Court judges assigned to the Monterey Branch. A fourth is occupied by a Superior Court judge, and the fifth is occupied by a court commissioner. The court commissioner is a lawyer who is authorized by California state law to conduct arraignments for traffic cases and to settle those cases in which a jury trial is not requested. The court commissioner operates under the auspices of the Monterey Branch Municipal Court.

F. CASE FLOW WITHIN THE MONTEREY BRANCH

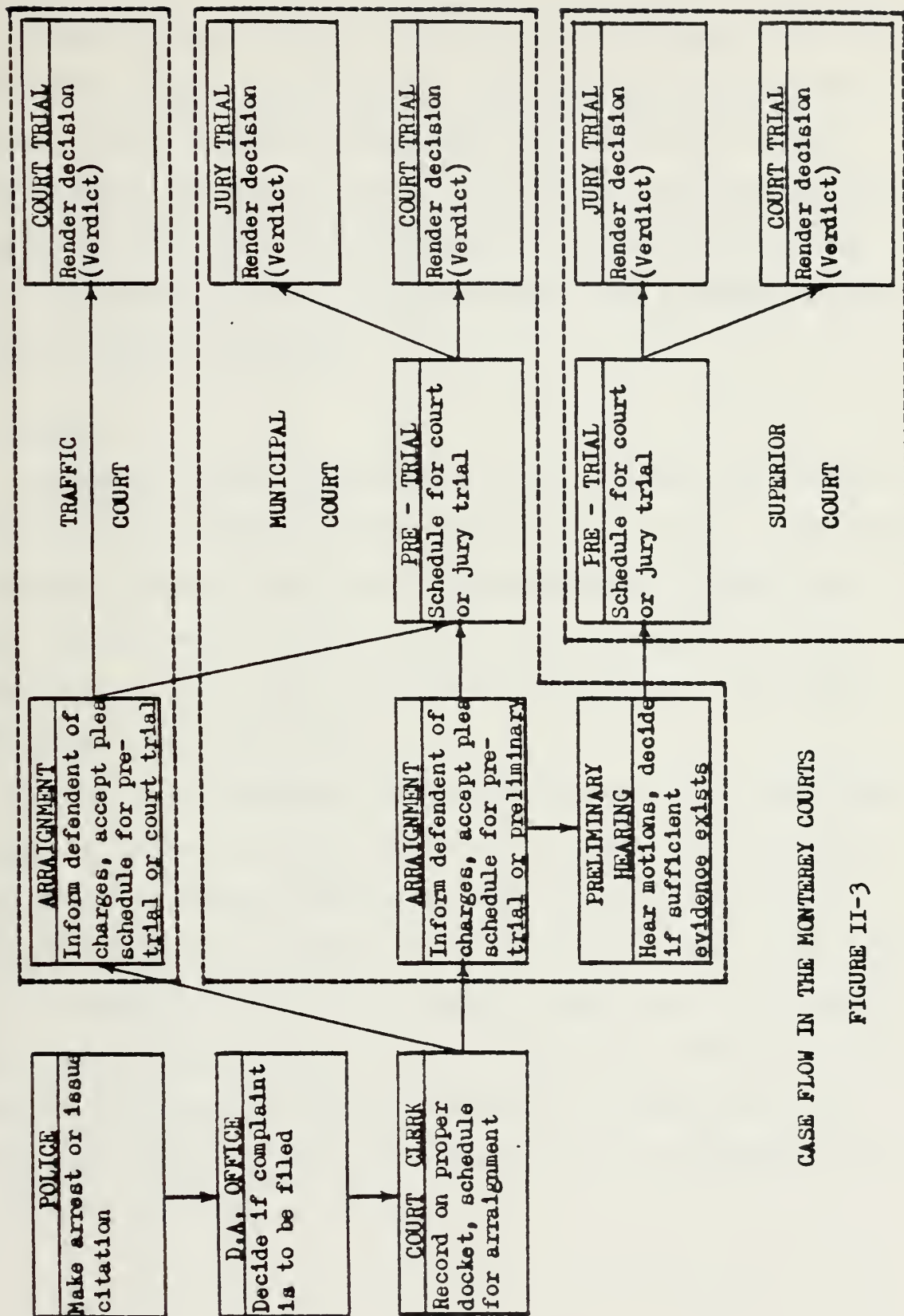
A case begins with an arrest or issue of citation by one of the local law enforcement agencies within the physical jurisdiction of the Monterey Branch. Representatives of each agency bring copies of the arrest reports to the Assistant District Attorney's office in the Monterey Annex Courthouse on a daily basis. The arrest reports are reviewed by a senior Deputy District Attorney to determine if sufficient evidence exists to warrant filing a complaint with the court clerk of the Monterey Branch Municipal Court. Complaints filed are entered by the court clerk in either the criminal docket (for felonies and non-traffic related misdemeanors) or the traffic docket (for traffic related misdemeanors).

The initial step taken by the Municipal Court is the arraignment of the defendant. At the arraignment the defendant is informed of the charge, allowed to enter a plea to the charge, and if necessary, a lawyer is appointed to represent the defendant at this time. If the case is filed

on the traffic docket, arraignment is held in Traffic Court, which is presided over by the court commissioner. Non-traffic misdemeanors and felony arraignments are held in Municipal Court, presided over by a Municipal Court judge. At the time of arraignment, a pre-trial hearing date is set for non-traffic misdemeanors and for traffic misdemeanors in which the defendant has requested a jury trial. For felony cases, a date is set for a preliminary hearing to be held in Municipal Court, at which time the judge will decide if sufficient evidence exists for the case to proceed into Superior Court.

The pre-trial hearing is held to give both attorneys the opportunity to discuss the case with the judge to determine if the case can be settled without going to trial. At this time, the defendant may change his or her initial plea to a plea of guilty, thereby disposing of the case. If the defendant maintains the initial plea of not guilty, the defendant at this time selects to be tried either by jury or by the judge sitting alone. Once a selection has been made, a trial date is set.

Due to the large number of jury trials scheduled, a readiness conference is held on the afternoon prior to the scheduled jury trial date. The purpose of the conference is to determine which cases are ready to proceed. Also, the conference provides the attorneys another opportunity to attempt to dispose of the case before trial. If a case can be disposed without trial, the case is scheduled for disposition at 0815 the next morning, prior to the start of jury trials at 0900. Cases that cannot be disposed without a trial and are ready to proceed are scheduled for trial the next day. Those that are not ready are rescheduled to another jury trial date.



CASE FLOW IN THE MONTEREY COURTS

FIGURE II-3

Figure II-3 is a flowchart depicting the flow of cases in the Monterey Branch. Cases can be disposed at any step along the chart by either a plea of guilty by the defendant or by dismissal of charges. Records kept by the court do not allow for an exact analysis of the number of cases disposed at each step; however it can be estimated that 75-85% of the cases filed are disposed without being scheduled for jury trial at the pre-trial stage.

G. SUMMARY

The Monterey Branch of the Monterey County Municipal Court District operates at the foundation of the California court system. It is at the Municipal or Justice Court levels that defendants and witnesses have their initial contact with the courts. Initial impressions of the efficiency and effectiveness of the courts will be made on the basis of the operation of these courts.

A point to be gleaned from this chapter and some of the numbers discussed in Chapter I is the inordinate amount of time spent on criminal jury trials in relation to the total number of cases handled by the Monterey Branch. Of all cases filed at the Monterey Branch, only 15-25% are ever scheduled for jury trials, and of these, only 13% are actually presented to a jury. However, two out of every five working days of the Monterey Branch Municipal Court are devoted to criminal jury trials. This means that 40% of the Court's time is devoted to disposing of only 2-3% of the Court's total caseload.

III. MONTEREY BRANCH MUNICIPAL COURT OPERATIONAL CHARACTERISTICS

A. INTRODUCTION

This chapter will be an examination of three aspects of the criminal jury trial scheduling system currently in use in the Monterey Branch Municipal Court. These three aspects are measurements of efficiency and effectiveness, the costs of the scheduling system to witnesses and jurors, and the characteristics of the case flows under the present scheduling system.

The data used for the examination is from the time period of January 1981 to June 1981. The examination was limited to this time period because data available on cases scheduled and disposed prior to January 1981 were incomplete. The data utilized were collected by the author from three primary sources. The first source was official records maintained by the Monterey Branch Municipal Court on cases handled by the court and on jury panel usage.⁵ The second source was witness lists maintained by the Monterey County District Attorney's Office located in Monterey, California. The third source was replies to surveys sent by the author to witnesses and jurors who were involved with cases during the six-month period examined.

The purpose of this examination is to develop standards to be used in evaluating alternative methods of scheduling jury trials, and to

⁵A summary of the data collected from the Monterey Branch Municipal Court records is presented in Appendix A.

establish some statistics on current operations to be used for modeling and testing alternatives.

B. EFFICIENCY AND EFFECTIVENESS MEASURES

Two measurements were developed by the author of the current operations for use in comparing alternative scheduling systems to the system currently in use at the Monterey Branch Municipal Court. The first measurement was the average number of times a case was rescheduled prior to being disposed. This was a measure of how efficiently cases were disposed using the current scheduling system. The second measurement taken was the number of cases scheduled for jury trial during the six-month period which were not disposed at the end of the period. This measure will be used to evaluate the effectiveness of alternatives in queuing cases for disposal by the Municipal Court.

For the purpose of the efficiency measure, the cases scheduled for jury trial and disposed during the six-month period were stratified between traffic and non-traffic cases, and also between those cases that were disposed by jury trial and those cases disposed in some other manner. The reason for stratifying the data was the different characteristics of the cases in each category. Cases that were disposed by jury trial were rescheduled more often than cases disposed in other means, and combining cases might obscure the efficiency in the different areas of the alternatives. For example, an alternative may be very efficient in queuing cases that are disposed by jury trial, but be inefficient in queuing cases disposed by other means. If the data were combined, this efficiency in queuing jury trial cases would be hidden by the inefficiency of non jury

trial cases. A second reason for stratifying was due to the witness makeup of the different type cases. Non-traffic cases have more civilian witnesses than traffic cases, and when cost data are added to the efficiency measure, an undesired leveling process of costs takes place.

The efficiency measure, average number of times cases were rescheduled, is shown for each category in Table III-1. The average for all cases was 1.20 times rescheduled; however, a large discrepancy existed between cases disposed by jury trial and cases disposed by other means. The average for jury trial cases was 2.28 times rescheduled as compared to only 0.94 times for non jury trial cases. These numbers indicate that the present scheduling system is much more efficient in queuing non jury trial cases than jury trial cases.

Not included in the above figures are cases which were scheduled but not disposed in the six-month period examined. At the end of the six-month period, a total of 72 cases which had been scheduled had not been disposed. This represents approximately 15% of all cases scheduled. This figure of 72 cases will be used as the effectiveness standard for the comparison of alternatives. To be considered a viable alternative, by the author, this standard must be met or improved upon by the alternative.

This measure was the second choice of the author for an effectiveness measure, the first choice being days between arraignment and disposition. However, when the alternatives proposed by the author were tested, days between arraignment and disposition was not an adequate measure of effectiveness, in that the measure indicated that some of the

TABLE III-1

AVERAGE NUMBER OF TIMES CASES RESCHEDULED

	TRAFFIC CASES	NON-TRAFFIC CASES	TOTAL
JURY TRIAL CASES	2.43	2.14	2.28
NON JURY TRIAL CASES	0.95	0.92	0.94
TOTAL	1.23	1.16	1.20

alternatives had maintained the effectiveness as currently experienced in the Municipal Court, when the alternatives were actually increasing the Court's backlog of cases.

C. COST DATA

To assess the impact of inefficiencies in the current scheduling system and to facilitate comparison of alternatives, the author calculated estimates of costs incurred by witnesses and jurors who were involved with cases scheduled during the six-month period. In calculating the costs, the author assumed that an efficient operation would exist if cases were disposed the first time they were scheduled. Though not realistic, this assumption was needed to establish an efficiency standard against which the inefficiencies could be measured.

Total costs to the witnesses were estimated as the product of four numbers. The first number was an estimated cost per witness for each time a case was rescheduled; developed by use of a survey sent to people

who had been subpoenaed as witnesses in cases scheduled during the six-month period examined. The survey asked the respondents to indicate the amount of on-the-job time lost due to their participation, and the amount of compensation they would have normally received for that time. The respondents were also asked to indicate the amount and nature of any other expenses incurred as a result of their participation.

Witness names were taken from witness lists maintained by the Monterey County District Attorney's office located in Monterey, California. Because the costs of personnel connected with law enforcement agencies are not included in this study, surveys were sent only to those witnesses whose jobs are not connected with a law enforcement agency. A total of 520 surveys were sent; however 33 were returned as undeliverable, leaving a total of 287 surveys from which replies might be expected. A total of 69 surveys were returned, giving a return rate of 24.0%. Using the data provided by the returned surveys, an average cost per witness was estimated at \$70.50 each time a case was rescheduled.

The second number is the average number of witnesses per case. The averages were calculated from the witness lists used above. Lists were available for approximately 81% of the cases scheduled during the six-month period. The average number of witnesses per case for each category is shown in Table III-2.

The third number was the average number of times each case was rescheduled. By using this number, the total cost for the jury trials was not calculated, since the cost to witnesses on those days that cases were scheduled and disposed is not included. This is in accordance with the efficiency standard established earlier.

The product of the above three numbers was multiplied by the fourth number, the total number of cases to arrive at an estimate of total cost of inefficiency. For all cases, this cost was estimated to be \$43,976. This cost is for the six-month period studied only; the number cannot necessarily be doubled to arrive at an estimate of annual cost. Estimates of costs in each category are shown in Table III-3.

A second area of inefficiency in the scheduling system occurs when a jury panel is called to serve and then not used. This occurs when cases are scheduled to proceed to jury trial, only to be disposed by means other than jury trial. This occurred a total of 25 times in the six-month period studied. In the same time period, jury panels were used in a total of 79 cases. In the period studied then, jury panels were called but not used approximately 24% of the time.

To develop a cost estimate for this problem, surveys similar to the surveys sent to witnesses were sent to one hundred jurors, selected at random from jury panel lists maintained by the Monterey Branch Municipal Court jury clerk. A total of 45 surveys were returned, giving a return rate of 45%. Using the data collected in the survey, an average cost was estimated for each time a juror was called to serve. That estimate was \$46.07. Also from the jury panel lists, an average number of jurors per jury panel was calculated. The average number of jurors was multiplied by the cost estimate per juror to arrive at a total cost per panel. To obtain a cost estimate for the unused jury panels for the six-month period studied, the total cost per panel was multiplied by the number of times panels were unused. The estimate for this inefficiency was \$39,543.

TABLE III-2
AVERAGE NUMBER OF WITNESSES PER CASE

	TRAFFIC CASES	NON-TRAFFIC CASES	TOTAL
JURY TRIAL CASES	0.27	2.58	1.36
NON JURY TRIAL CASES	0.48	2.15	1.23
TOTAL	0.45	2.23	1.25

TABLE III-3
TOTAL ESTIMATED COST TO WITNESSES

	TRAFFIC CASES	NON-TRAFFIC CASES	TOTAL
JURY TRIAL CASES	\$ 1,923	\$14,791	\$16,714
NON JURY TRIAL CASES	\$ 5,369	\$21,893	\$27,262
TOTAL	\$ 7,292	\$36,684	\$43,976

D. CHARACTERISTICS OF THE CASE FLOWS

The handling of cases scheduled for criminal jury trials can be best illustrated by a decision matrix such as the one shown in Figure III-1. The cases are considered in a two-step process. The first step is conducted in a readiness conference held the day prior to the scheduled jury trial date. At the readiness conference each case is reviewed in the order of arraignment dates, with those cases with the earliest arraignment date being reviewed first. A case is first reviewed to determine if the case is ready to proceed to a jury trial. If a case is ready to proceed, the case is placed on the next day's calendar for jury trial and assigned to one of the three courtrooms. If a case is not ready to proceed, an attempt is made to dispose of the case in a manner other than jury trial. If the case cannot be disposed, the case is rescheduled for a later jury trial date.

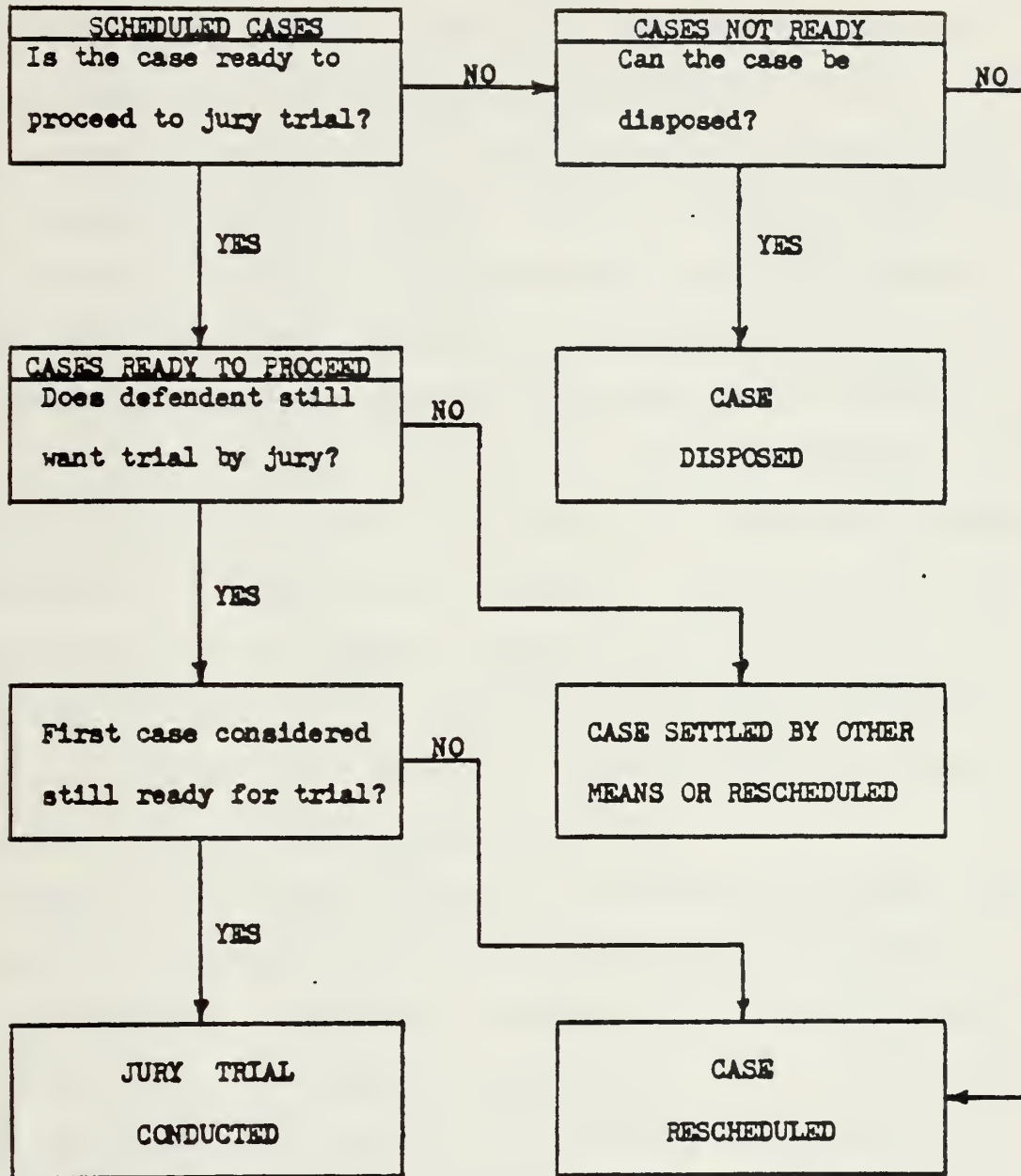
The second step occurs on the scheduled jury trial date. Each case that was calendared during the readiness conference is considered for possible disposal by means other than jury trial. The first case that cannot be disposed by other means and is indeed ready to proceed to jury trial is the case that will be presented to a jury on that day. Cases following are considered for possible disposal, but if they cannot be disposed, these cases are rescheduled for a later jury trial date. This process takes place in all courtrooms, with each courtroom considering its own separate group of cases.

In examining the characteristics of the case flows to decide on a modeling technique, the author's starting point was an examination of the

relationships between the number of cases scheduled for jury trial and the numbers of cases disposed. To test relationships, regression analyses were made for events in the decision matrix. If significant correlations existed, the most prudent method of describing the case flow characteristics would be some sort of a regression model. It was felt by the author that if more than half of the weekly variances in events in the matrix could be explained by another event in the matrix, the correlation would be considered significant. For this reason, a correlation coefficient of .71 ($\sqrt{.5}$) was considered the cutoff level for significance.

The first regressions tested involved relationships between beginning and end states in the matrix. Three regressions were made for these relationships. They were the number of cases scheduled with the number of jury trials; the number of cases scheduled with the number of cases disposed by means other than jury trial; and the number of cases scheduled with the total number of cases disposed regardless of means. The correlation coefficients for these regressions were .395 for the first regression, .508 for the second, and .532 for the third. None of the coefficients exceeded the significance level set by the author.

Since no significant relationships existed between the beginning and end states of the decision matrix, the next step in the examination was to treat each step in the matrix as a separate event. Regression analyses were conducted between each event. The resulting correlation coefficients were higher than the previous regressions, but again none of the coefficients exceeded the significance level established by the author.

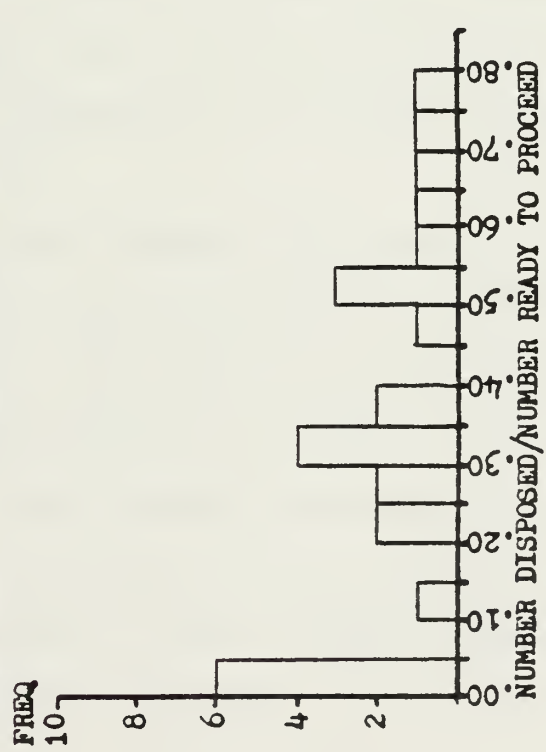
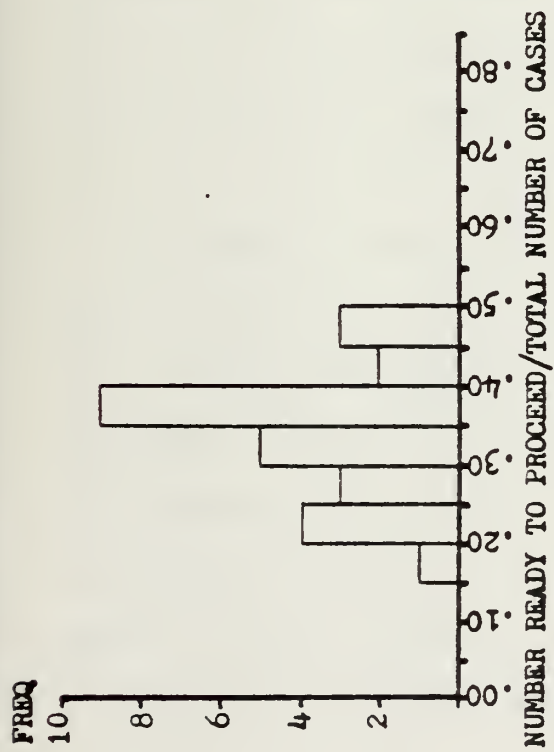
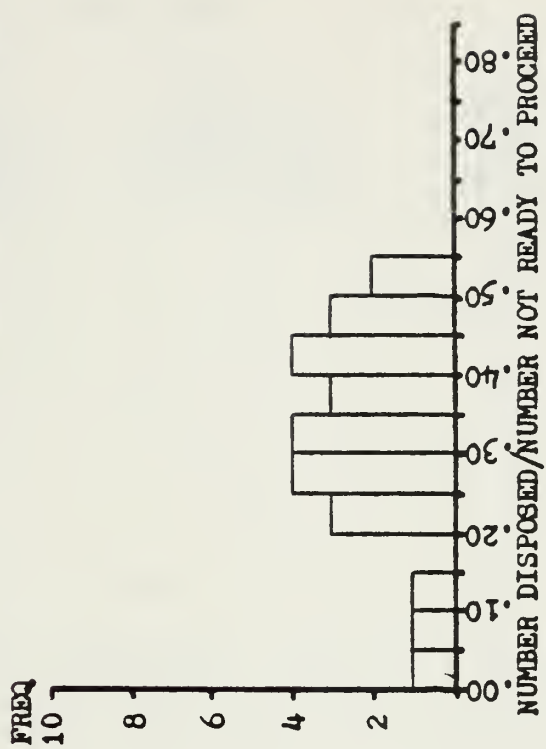
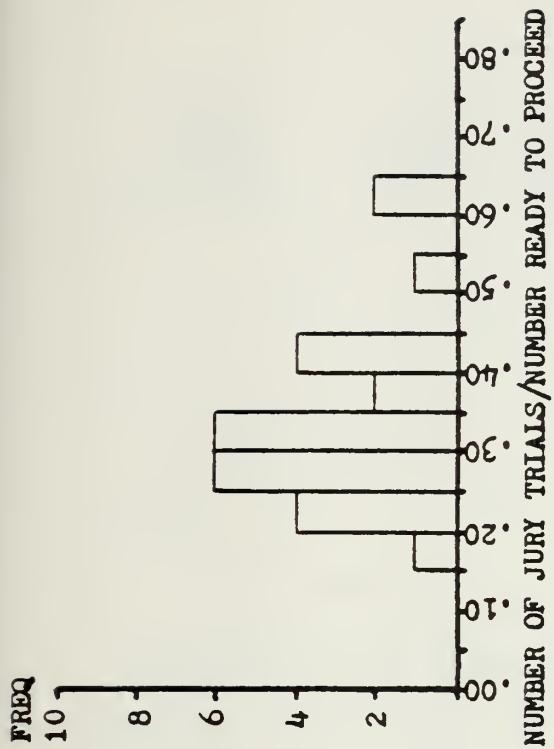


DECISION MATRIX FOR CASE CONSIDERATION

FIGURE III-1

A second possible method of describing the characteristics of case flows was to treat the decision matrix as a transition matrix and to develop probabilities of transition from each state to the next. To be able to model the case flows as a transition matrix, reliable probabilities of transition would be needed. To develop transition probabilities, it was necessary to evaluate the percentages of cases transitioning between states in each week to determine if a pattern of transition existed. The first step in this evaluation was the construction of histograms showing the frequency of occurrence for a given range of percentages transitioning from one state to the next. Figure III-2 shows the histograms constructed. The patterns of the histograms indicate that the percentages do not occur in a pattern. Because of this, it was felt by the author that a single, reliable probability figure could not be developed for each transition state. The use of a transition matrix as a model for case flows was therefore rejected by the author.

Because of the uneven distribution of percentages, the method selected of modeling the case flows was the Monte Carlo simulation technique. By using simulation, each step in the decision matrix can be treated as a separate event, with different characteristics. Also, by using simulation, the probability of transition from one state to the next can be varied, in accordance with the variance observed in the sample. How the Monte Carlo simulation was conducted will be fully discussed in Chapter IV.



SELECTED RATIOS OF CASE FLOW CHARACTERISTICS

FIGURE III-2

TABLE III-4
JURY PANEL USAGE

<u>NUMBER OF CASES CALENDARED</u>	<u>NUMBER OF TIMES NO JURY TRIAL WAS HELD</u>	<u>NUMBER OF TIMES JURY TRIAL WAS HELD</u>	<u>PERCENTAGE OF TIMES JURY TRIAL WAS HELD</u>
1	12	10	45.5
2	6	27	81.8
3	3	25	89.3
4 or more	4	17	81.0
Total	25	79	76.0

In addition to the analysis of the overall case flow, an analysis of the process of considering cases that takes place in the courtroom on the scheduled jury trial date was conducted by the author. The analysis covered all incidences in which at least one case was calendared for a courtroom during the readiness conference, and a jury panel had been called to serve in that courtroom.

Two aspects of this process were included in the analysis. The first aspect analyzed was a comparison between the number of cases calendared in a courtroom and whether or not a jury trial was conducted in that courtroom. The results of that comparison are displayed in Table III-4. The comparison reveals that in those incidences where only one case was calendared in a courtroom, jury trials were held less than half the time. However, in those instances in which at least two cases were calendared, jury trials were held more than 80% of the time.

The second aspect analyzed was the position of the case selected for jury trial in the order of cases considered in the courtroom in those instances when a jury trial was held. Of the 79 cases selected for jury trial during the six-month period studied, 55 of the cases, or approximately 70%, were the first case considered in the courtroom. Twenty of the cases, or approximately 25%, were the second case considered, and the remaining 4 cases, approximately 5%, were the third case considered in the courtroom. In no instance in which a jury trial was held was it necessary for the court to consider more than three cases.

E. SUMMARY

In this chapter measurements of efficiency and effectiveness were established to act as standards for evaluation of alternative scheduling systems. Additionally, cost estimates were made of inefficiencies in the current scheduling system. For the six-month period studied, the cost estimate was a total of \$83,519. Also, the characteristics of case flows under the current scheduling system were examined to decide on a modeling technique to be used in testing alternatives. The technique selected was Monte Carlo simulation. Finally, the selection process that occurs in the courtroom on the scheduled jury trial date was examined to look for possible inefficiencies in that portion of the scheduling system.

IV. TESTING AND EVALUATION OF ALTERNATIVES

A. INTRODUCTION

In this chapter, alternatives to the current scheduling system in use at the Monterey Branch Municipal Court will be developed and evaluated. The chapter will cover the rationale used by the author in developing alternatives, techniques used by the author in testing the alternatives, and an evaluation of the alternatives based on a comparison with the present scheduling system.

B. DEVELOPMENT OF ALTERNATIVE POLICIES

Alternative policies were developed and evaluated by the author in three areas. The first area was the policy for scheduling cases for criminal jury trial. The second area concerned the timing of the readiness conference, and the third area was the court's policy for calendaring of cases during the readiness conference.

As mentioned in Chapter I, a court policy on the number of cases to be scheduled in any one week has not been established by the Monterey Branch Municipal Court. The author's proposed alternative is to establish a limit on the number of cases to be scheduled each week. A limit could reduce the number of witnesses subpoenaed each week and could even out the court's workload.

To keep the policy simple, possible limits were considered by the author in multiples of five. Three limits were tested and evaluated by the author. The lowest limit tested was 20 cases per week. This was

chosen as the lower limit because it was the first multiple of five greater than the quotient of the total number of cases scheduled in the six-month period, 471, divided by the number of weeks in the period, 26. With a lower limit, even if every case was disposed of the first time scheduled, the court would not be able to schedule all the cases that had requested jury trials. Two additional limits of 25 and 30 were tested by the author. Higher limits were excluded from consideration in that the average number of cases scheduled per week under the current system was less than 35. A limit of 35 or higher would not alter the characteristics of the case flows and would therefore not reduce the witnesses' costs.

As an alternative to the current practice of holding the readiness conference on the day prior to the scheduled jury trial date, the author proposed holding the conference during the week prior to the scheduled jury trial dates. With this change, the witnesses subpoenaed in the cases rescheduled or disposed during the readiness conference would have more time to reverse preparations made by them to appear at the jury trial. It was felt by the author that by giving the witnesses more time, the incidences of witnesses losing on-the-job time could be reduced.

In the third area, current court policy places no minimum limit on the number of cases calendared for criminal jury trial during the readiness conference. The policy proposed here would place a minimum limit of two cases calendared in each courtroom before a jury panel is called to serve in that courtroom. The minimum limit was proposed to increase the usage rate of jury panels called to serve. The limit was selected based on the characteristics of calendared cases and the relationship

between the number of calendared cases and the incidence of jury trials being held discussed in Chapter III.

C. TESTING THE ALTERNATIVES

The characteristics of the case flows that were observed in the six-month period studied by the author were used as the basis for the testing of the alternatives. The first alternative, limiting the number of cases scheduled each week, was tested using Monte Carlo simulation. The second and third proposed alternatives were tested using sensitivity analysis.

Simulation was chosen to test the first alternative because the effect of limiting the number of cases each week on the operation of the Municipal Court could not be predicted, due to the interaction of events that occur between the scheduling and the actual jury trials. To conduct the simulation the flow of cases scheduled for jury trial was structured into four decision points. These decision points correspond to those shown in Figure III-1. To simulate the decisions, percentages of cases flowing on paths leading from each decision point were determined in the following manner. The weekly percentages as observed in the 26 weeks studied by the author were displayed in cumulative frequency graphs. The total height of each graph was 26. To select the percentages to be used for each week in the simulation, a random number, uniformly distributed between 0 and 26, was generated and compared to the graph. The first percentage which had a height on the cumulative graph greater than the random number was selected as the percentage to be used in the simulation. This process was repeated for each decision point in each of the 26 weeks simulated.

Another characteristic that had to be simulated was the availability of courtrooms to hold trials. Following a procedure similar to the one used for the decision points, the number of courtrooms available each week in the period studied was displayed in a cumulative frequency graph, and a random number generated for each week in the simulation selected the number of courtrooms to be available.

To insure that the characteristics of the percentages used in the simulation did not distort the results, averages for each decision point were calculated and compared to the averages as observed in the 26 weeks studied by the author. To be acceptable, the average of the simulated percentages had to be within 10% of the averages observed in the actual operation of the court. If a group of percentages was found to be unacceptable, the process of selecting percentages was repeated until an acceptable group was found.

Cases were queued into the simulation from a list constructed by the author using the actual cases scheduled for jury trial during the six-month period. The cases were arranged and queued by pre-trial date, the day on which cases are first scheduled for jury trial. If a case was re-scheduled during a week in the simulation, the case was reentered into the queue by the date the case was rescheduled. In order to compare the alternatives tested by simulation to the six-month period studied, the number of times each case was rescheduled and the number of cases remaining in the queue at the end of the 26 weeks simulated were recorded by the author for each simulation.

In testing the first alternative, the concern was with the alteration of the end results of the case flows, assuming that the

characteristics of the case flows remain the same as those observed during the six-month period studied. In testing the second and third alternatives, this is not the concern. The concern with the second and third alternatives is with how the alternatives might change the characteristics of the case flows, and if changes occur, whether the changes would adversely affect the end results. For this reason, sensitivity analysis was used to test the second and third alternatives.

The characteristics which could be affected by the second alternative, changing the readiness conference to the week prior to the scheduled jury trial date, are the ratio of cases indicating a readiness to proceed to trial to the number of cases scheduled and the ratio of cases that have indicated a readiness to proceed that result in actual jury trials on the scheduled jury trial date to the number of cases considered on that date. The sensitivity analysis was conducted to see how much of a change in these characteristics would be required to affect the number of jury trials held.

With the third alternative, two factors are of concern. The first is the ability of the court to schedule at least two cases in each courtroom during the readiness conference in those instances where the court had scheduled only one case during the six-month period studied. The second factor is the stability of the ratio of the number of cases resulting in actual jury trials to the number of times at least two cases were calendared in a courtroom during the readiness conference. To test the third alternative, a sensitivity analysis was conducted by the author to evaluate how often the court would have to be able to schedule a second case in a courtroom to achieve the same number of jury trials

as conducted in the six-month period, for different rates of change in the critical ratio.

D. EVALUATION OF THE TEST RESULTS

The results of the simulation of case flows with limits placed on the number of cases scheduled each week are displayed in Table IV-1. To facilitate comparison, the numbers for each category in the table are also displayed for the six-month period studied by the author.

As expected by the author in proposing placing limits on the number of cases scheduled, the incidence of cases being rescheduled was reduced. The average number of times a case was rescheduled was successively lower with each lower limit. However, in none of the three simulations was the effectiveness of the current system maintained. Of interest is the area in which the effectiveness was lost. In the area of queuing cases which were disposed by jury trial, the effectiveness level was maintained by the simulation in which the limit was 30, and only slightly reduced in the other two simulations. The main loss of effectiveness was in the area of queuing cases disposed by means other than jury trial. This reinforces the observation made in Chapter III that the current scheduling system is more effective in queuing cases disposed by means other than jury trial than in queuing cases disposed by jury trial.

Because of the failure of the simulations to meet the effectiveness level shown by the current scheduling system, the alternative of placing limits on the number of cases to be scheduled each week was eliminated from further consideration by the author.

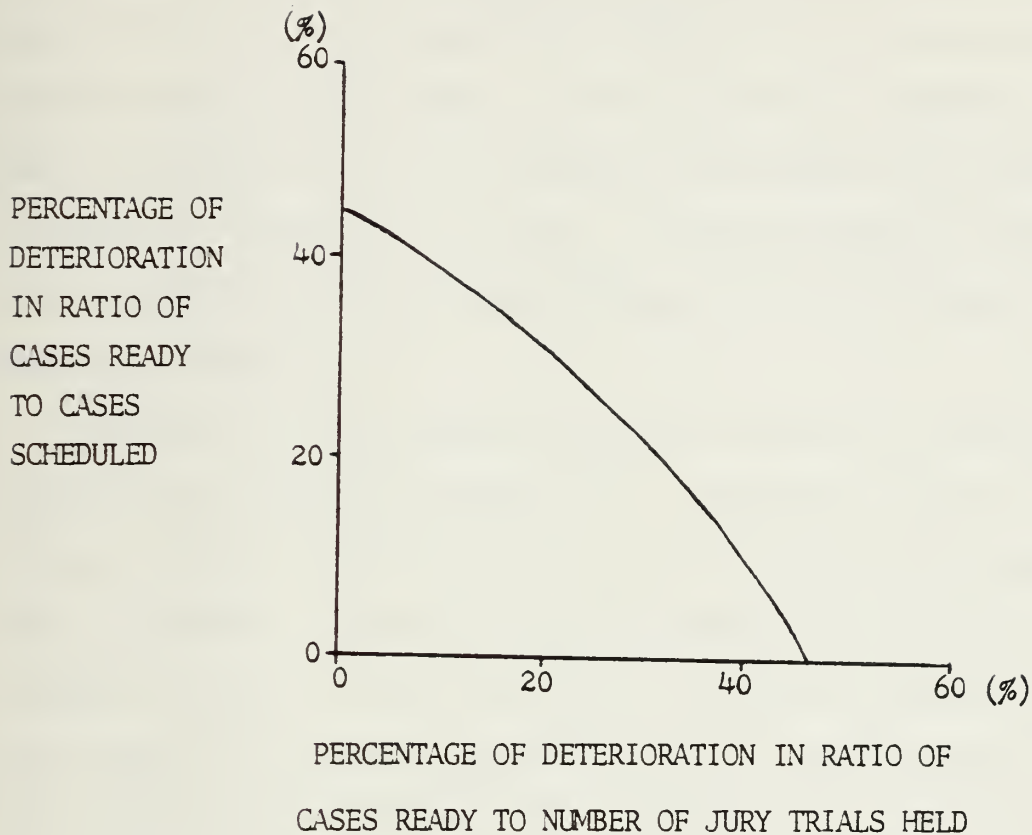
TABLE IV-1

RESULTS OF THE MONTE CARLO SIMULATIONS

A	B	C	D	E	F	G	H	I	J	K
20	T	259	87	66	13	0.68	45	0.67	0.68	N/A
	NT	261	68	59	9	0.79	29	0.62	0.74	N/A
	ALL	520	155	125	22	0.73	74	0.65	0.71	267
25	T	344	108	79	22	1.02	44	0.61	0.90	N/A
	NT	306	80	70	13	0.88	30	0.70	0.83	N/A
	ALL	650	188	149	35	0.96	74	0.65	0.87	205
30	T	409	123	95	24	0.96	39	0.87	0.94	N/A
	NT	371	106	93	20	0.98	40	0.83	0.94	N/A
	ALL	780	229	188	44	0.97	79	0.85	0.94	158
N/A	T	464	150	113	38	0.95	39	2.43	1.23	N/A
	NT	421	105	99	19	0.92	40	2.14	1.16	N/A
	ALL	885	255	212	57	0.94	79	2.28	1.20	72

LEGEND

- A - Proposed limit. N/A is the current scheduling system.
- B - Category; T-Traffic cases, NT-Non traffic cases
- C - Total number of cases scheduled.
- D - Number of cases calendared during the readiness conference.
- E - Number of cases disposed during the readiness conference by means other than jury trial.
- F - Number of cases disposed on jury trial date by means other than jury trial.
- G - Average number of times cases disposed by means other than jury trial had been rescheduled.
- H - Number of cases disposed by jury trial.
- I - Average number of times cases disposed by jury trial had been rescheduled.
- J - Average number of times all cases had been rescheduled.
- K - Number of cases not disposed at the end of the period.



SENSITIVITY ANALYSIS OF SECOND ALTERNATIVE

FIGURE IV-1

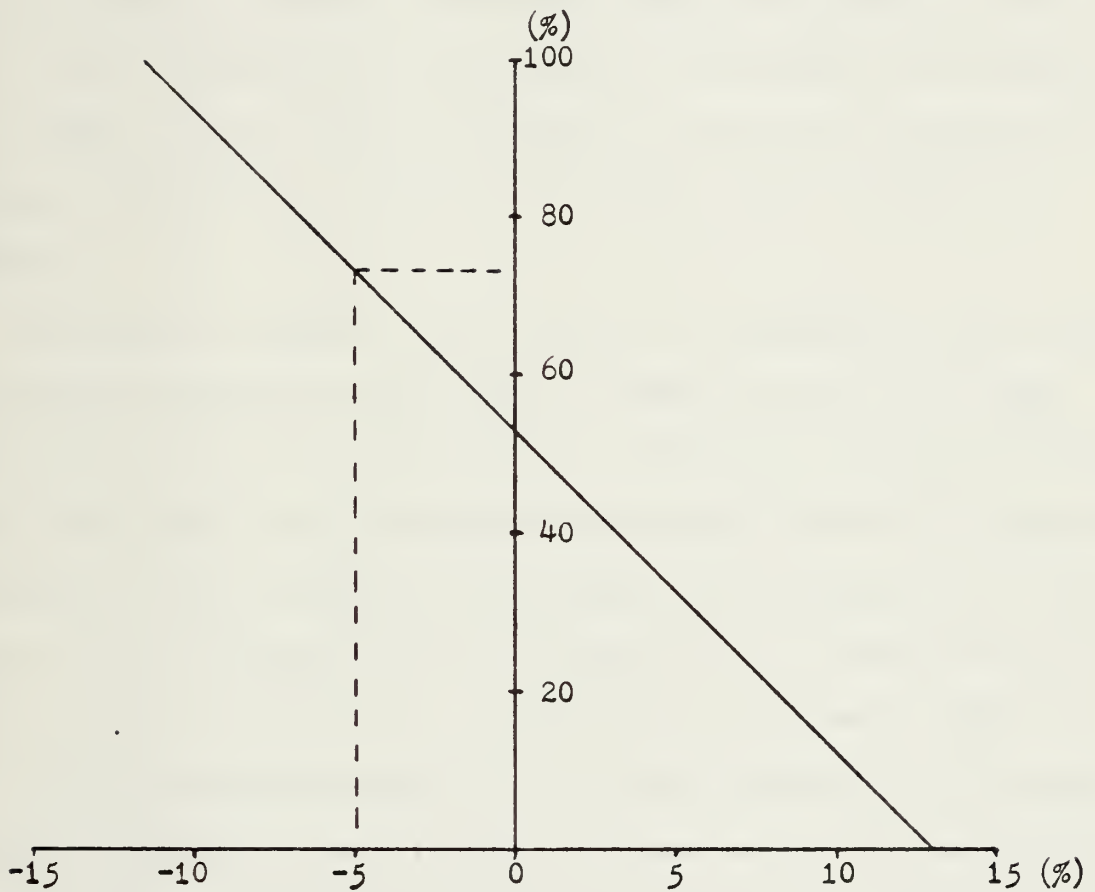
The results of the sensitivity analysis conducted to test the second alternative are displayed in Figure IV-1. The figure is a graph of the level of deterioration that would have to take place in the two ratios to lower the weekly average number of jury trials held to the level observed in the six-month period. From the graph it can be seen that to lower the weekly average, one of the ratios must deteriorate more than 44% if the

other ratio remains constant. Assuming equal deterioration, each ratio would have to deteriorate approximately 24% to lower the weekly average number of trials. To evaluate the possibility of the second alternative adversely affecting the number of jury trials held, a judgment must be made as to whether the ratios concerned would actually deteriorate enough to reduce the number of jury trials. A further discussion of this judgment is included in the Recommended Changes to the Scheduling System section in Chapter V.

The results of the sensitivity analysis conducted for the third alternative are displayed in Figure IV-2. As discussed earlier in this chapter, the interaction of two factors will determine the success of the third alternative. Those two factors are the ability of the court to calendar a second case where previously only one case had been calendared and changes in the ratio of jury trials held to instances where two or more cases have been calendared in a courtroom. The graph shows the percentage of times a second case would have to be added to maintain the same number of jury trials, for different levels of change in the critical ratio. For example, if the current ratio of .841 decreased by 5% to .799, a second case would have to be added to approximately 74% of the courtrooms in order to hold the same number of jury trials.

From the graph, it can be determined that a deterioration in the critical ratio of slightly more than 10% would require that all courtrooms have a second case calendared. Even with no deterioration in the ratio, 54% of the one case courtrooms would have to have a second case added to maintain the same number of jury trials as observed in the six-month period studied. Again, a judgment must be made as to the expected

PERCENTAGE OF TIMES SECOND
CASE MUST BE ADDED TO MAINTAIN
NUMBER OF JURY TRIALS



PERCENTAGE OF CHANGE IN RATIO OF JURY TRIALS HELD
TO COURTROOMS WITH TWO OR MORE CASES CALENDARERD

SENSITIVITY ANALYSIS OF THIRD ALTERNATIVE

FIGURE IV-2

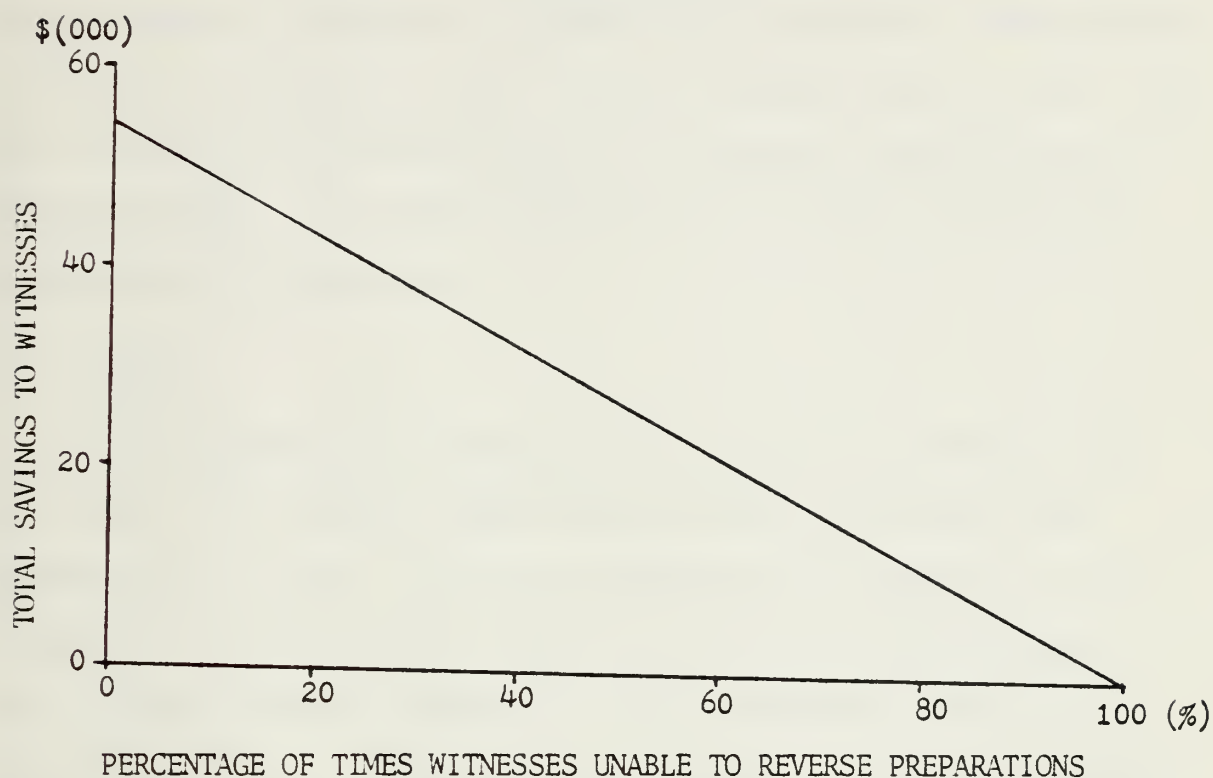
level of deterioration in the critical ratio and in the court's ability to add a second case. As with the second alternative, that judgment will be discussed in Chapter V.

E. COST ANALYSIS OF THE ALTERNATIVES

Because the first alternative was rejected by the author on the basis of its failure to maintain an acceptable effectiveness level, a cost analysis of this alternative was not conducted. Cost analyses were conducted to estimate possible savings to witnesses if the second alternative is adopted, and possible savings to jurors if the third alternative is adopted.

The potential savings to the witnesses is dependent upon their ability to reverse preparations made by them to attend the jury trial, early enough to avoid loss of on-the-job time. Therefore, to analyze the potential cost savings to the witnesses of the second alternative, savings were calculated across the range of the extreme of the witnesses never being able to reverse preparations to the extreme of the witnesses always being able to reverse preparations. The results are displayed in Figure IV-3.

If the witnesses are never able to reverse preparations, no savings would be realized; if the witnesses are always able to reverse preparations, the total savings would be \$55,606. Since no data were available to the author on the probability that witnesses would be able to reverse preparations, an expected value of savings could not be calculated. However, assuming that the chances of the witnesses being able or not being able to reverse preparations are equally likely, the potential savings to the witnesses would be \$27,803 for the six-month period, a reduction of 36% of the total costs to the witnesses under the current scheduling system.



COST SAVINGS ANALYSIS OF SECOND ALTERNATIVE

FIGURE IV-3

Potential savings to the jurors if the third alternative is adopted is dependent on the stability of the ratio of jury trials held to jury panels called in those instances in which two or more cases were calendared in a courtroom. To calculate the potential savings to the jurors it was assumed by the author that sufficient jury panels would be called to conduct the same number of trials as had been conducted in the six-month period studied. If the above ratio remained the same, a total of 94 jury panels would have to be called to conduct 79 jury trials. This

represents a reduction of 10 jury panels from the number of jury panels called during the six-month period studied. At an average cost of \$1582 per jury panel as calculated in Chapter III, the potential savings would be \$15,820, a reduction of costs to jurors on unused panels of 40%. However, if the ratio deteriorated by 5%, the potential savings would be reduced to \$7910, and if the ratio deteriorated by 10%, the potential savings would be eliminated.

F. SUMMARY

In this chapter, three alternatives to the present scheduling system in use at the Monterey Branch Municipal Court were proposed and evaluated by the author. The first alternative was rejected due to an inability to maintain current effectiveness levels. The second and third alternatives were retained as viable alternatives and cost analyses were conducted to evaluate potential savings to witnesses and jurors. Total potential savings for the six-month period were calculated to be \$71,426.

V. RECOMMENDATIONS

A. INTRODUCTION

This chapter contains the recommendations of the author concerning the second and third alternatives proposed in Chapter IV, and the reasoning used by the author in making the recommendations. Additionally the author makes recommendations of areas for future research in connection with the Monterey Branch Municipal Court. The chapter concludes with the author's final observations concerning the proposed changes.

B. RECOMMENDED CHANGES TO THE SCHEDULING SYSTEM

It is the recommendation of the author that both the second and third alternatives proposed in Chapter IV be adopted by the Monterey Branch Municipal Court. In the case of the second proposed alternative, changing the readiness conference to the week prior to the scheduled jury trial date, the possible drawback lies in the potential reduction of effectiveness in queuing cases to be disposed by jury trial. This loss in effectiveness would be caused by a reduction in the ratio of cases indicating a readiness to proceed to the total number of cases scheduled, or a reduction in the ratio of actual jury trials to the number of cases calendared. Based on observations made by the author while attending several readiness conferences during the six-month period studied, it is the author's judgment that the ratios would not deteriorate to a point where the effectiveness of the scheduling system in queuing cases to be disposed by jury trial would be reduced. In the readiness conferences attended by the author,

pressure was placed on all participants by the Municipal Court judges to be ready to proceed to trial on the scheduled jury trial date. It is the author's opinion that this pressure would be sufficient to maintain the two critical ratios above that level which would negatively alter the effectiveness of the scheduling system. The author's recommendation that the second alternative be adopted is based on this opinion.

The success of the third alternative, that at least two cases be calendared for jury trial in a courtroom before a jury panel is called, is dependent upon two factors. The first is that the ratio of jury trials held to the number of jury panels called in courtrooms having at least two cases calendared, remain stable. As discussed in Chapter III, 70% of the cases that were presented to a jury were the first case considered by the court, and 95% of the cases were either the first or second case. The author contends that this observation supports the author's belief that the critical ratio would remain stable if the third alternative was adopted by the Monterey Branch Municipal Court.

The second factor is the number of times a second case can be calendared in those instances where under current policy only one case would be calendared. It is the author's opinion that, with the pressure described above, the court would be able to calendar a second case in a sufficient number of instances such that the number of jury trials will not be adversely affected. The author's recommendation that the third alternative be adopted by the Monterey Branch Municipal Court is based on this opinion and on the observation made in the preceding paragraph.

C. RECOMMENDATIONS FOR FUTURE RESEARCH

The author recommends that further research be conducted which covers all aspects of the operation of the Monterey Branch Municipal Court. As noted in the summary to Chapter II, 40% of the court's time is devoted to only 2-3% of the court's total caseload. Research needs to be conducted on the entire spectrum of the court's operation to determine if the court's time is being efficiently utilized.

Another area of possible research is improvement in the pre-trial operation of the Municipal Court. During the six-month period studied by the author, 77% of the cases scheduled for jury trial were disposed without a trial being conducted. If more of these cases could be disposed during the pre-trial phase, the load on the jury trial scheduling system would be lightened.

D. CONCLUSION

Two final concerns must be considered before reaching a decision on the alternatives proposed by the author. The first concern is the reversability of the alternatives. Neither the second nor the third alternative is necessarily permanent. If the court adopts either alternative and finds that the case flows are adversely affected, reversion to the previous methods of operating the scheduling system could be done immediately.

The second concern is the willingness of witnesses to participate in the judicial process. As part of the survey sent to the witnesses, the author asked the respondents to indicate if, based on their experience with the court, they would be willing to again come forward as witnesses

should the opportunity arise. Twenty-six percent of the respondents indicated they would not be willing to again participate as witnesses. The author contends that the adoption of the two alternatives recommended, with their potential savings, would help to alleviate this incidence of unwillingness on the part of the witnesses to again participate in the judicial process.

APPENDIX A

SUMMARY OF CASE FLOW DATA FOR CRIMINAL JURY TRIALS

Table A-1 and Table A-2 present the data on case flows gathered by the author from the Monterey Branch Municipal Court records. Table A-1 presents the data by week, while Table A-2 presents the totals for the six-month period. Each column in both tables is designated by a letter; the legend below gives an explanation of each column.

<u>COLUMN</u>	<u>MEANING</u>
A	- Each week in the six-month period is numbered consecutively, with week 1 being January 5-9, 1981.
B	- The data are broken into two categories; traffic cases (T), and non-traffic cases (NT), followed by a total for the week.
C	- Total number of cases scheduled for criminal jury trial in that week for each category.
D	- Total number of cases indicating they were ready to proceed during the readiness conference.
E	- Number of cases considered on the day of trial before all courtrooms had an actual jury trial case ready to go.
F	- Number of jury trials held in each week for each category.
G	- Number of cases rescheduled of those cases that had indicated they were ready to proceed.
H	- Number of cases disposed by means other than jury trial of those cases that had indicated they were ready to proceed.

<u>COLUMN</u>	<u>MEANING</u>
I	- Number of cases rescheduled of those cases that had not indicated they were ready to proceed.
J	- Number of cases disposed by means other than jury trials of those cases that had not indicated they were ready to proceed.
K	- Due to reasons such as the absence of a judge, trials lasting two days, etc., the Municipal Court was not always able to hold the maximum number of trials in a given week. This column shows the maximum number of jury trials the Court could have held in each week.
L	- Number of jury panels called to serve for criminal jury trials in each week.

TABLE A-1

A	B	C	D	E	F	G	H	I	J	K	L
1	T	31	12	7	4	7	1	12	7	---	---
	NT	15	1	0	0	1	0	6	8	---	---
	TOTAL	46	13	7	4	8	1	18	15	5	6
2	T	27	11	5	3	3	5	8	8	---	---
	NT	18	4	3	0	0	4	11	3	---	---
	TOTAL	45	15	8	3	3	9	19	11	3	3
3	T	19	9	6	1	5	3	7	3	---	---
	NT	27	4	2	1	1	2	15	8	---	---
	TOTAL	46	13	8	2	6	5	22	11	5	4
4	T	19	3	2	1	2	0	10	6	---	---
	NT	15	5	4	2	2	1	7	3	---	---
	TOTAL	34	8	6	3	4	1	17	9	4	4
5	T	21	5	2	2	2	1	11	5	---	---
	NT	18	2	1	1	1	0	12	4	---	---
	TOTAL	39	7	3	3	3	1	23	9	3	3
6	T	9	4	3	2	1	1	2	3	---	---
	NT	9	1	1	0	0	1	6	2	---	---
	TOTAL	18	5	4	2	1	2	8	5	3	3
7	T	10	3	1	1	2	0	3	4	---	---
	NT	21	5	1	1	4	0	10	6	---	---
	TOTAL	31	8	2	2	6	0	13	10	2	2
8	T	14	3	1	1	2	0	11	0	---	---
	NT	14	2	2	2	0	0	10	2	---	---
	TOTAL	28	5	3	3	2	0	21	2	3	3
9	T	25	4	2	0	3	1	18	3	---	---
	NT	20	7	5	3	3	1	8	5	---	---
	TOTAL	45	11	7	3	6	2	26	8	4	5
10	T	14	2	1	1	0	1	8	4	---	---
	NT	18	3	3	2	1	0	10	5	---	---
	TOTAL	32	5	4	3	1	1	18	9	5	4

TABLE A-1 (CONTINUED)

A	B	C	D	E	F	G	H	I	J	K	L
11	T	9	4	2	2	2	0	5	0	---	---
	NT	14	5	1	1	4	0	7	2	---	---
	TOTAL	23	9	3	3	6	0	12	2	3	3
12	T	16	7	5	2	3	2	7	2	---	---
	NT	18	4	1	1	2	1	11	3	---	---
	TOTAL	34	11	6	3	5	3	18	5	3	4
13	T	21	7	1	1	4	2	6	8	---	---
	NT	17	6	3	2	3	1	8	3	---	---
	TOTAL	38	13	4	3	7	3	14	11	3	4
14	T	21	9	3	1	5	3	7	5	---	---
	NT	18	4	2	2	2	0	8	6	---	---
	TOTAL	39	13	5	3	7	3	15	11	3	5
15	T	11	3	3	1	1	1	8	0	---	---
	NT	14	5	5	1	3	1	9	0	---	---
	TOTAL	25	8	8	2	4	2	17	0	4	4
16	T	21	7	7	1	1	5	9	5	---	---
	NT	14	4	4	3	1	0	8	2	---	---
	TOTAL	35	11	11	4	2	5	17	7	5	5
17	T	24	8	3	1	3	4	6	10	---	---
	NT	8	2	2	2	0	0	5	1	---	---
	TOTAL	32	10	5	3	3	4	11	11	4	4
18	T	18	5	2	1	4	0	9	4	---	---
	NT	14	6	3	2	4	0	6	2	---	---
	TOTAL	32	11	5	3	8	0	15	6	4	5
19	T	21	8	2	2	6	0	8	5	---	---
	NT	19	8	3	3	5	0	5	6	---	---
	TOTAL	40	16	5	5	11	0	13	11	6	6
20	T	22	6	4	2	1	3	10	6	---	---
	NT	22	5	4	1	4	0	10	7	---	---
	TOTAL	44	11	8	3	5	3	20	13	5	5
21	T	9	6	1	1	5	0	1	2	---	---
	NT	13	3	1	1	2	0	8	2	---	---
	TOTAL	22	9	2	2	7	0	9	4	2	2

TABLE A-1 (CONTINUED)

A	B	C	D	E	F	G	H	I	J	K	L
22	T	20	6	3	3	3	0	9	5	---	---
	NT	19	3	1	1	1	1	14	2	---	---
	TOTAL	39	9	4	4	4	1	23	7	4	4
23	T	21	5	2	1	3	1	12	4	---	---
	NT	14	7	6	3	1	3	5	2	---	---
	TOTAL	35	12	8	4	4	4	17	6	4	4
24	T	15	7	6	2	2	3	5	3	---	---
	NT	14	5	4	2	1	2	5	5	---	---
	TOTAL	29	12	10	4	3	5	10	8	6	6
25	T	11	1	0	0	1	0	6	4	---	---
	NT	17	3	2	2	0	1	5	9	---	---
	TOTAL	28	4	2	2	1	1	11	13	3	2
26	T	15	5	3	2	2	1	3	7	---	---
	NT	11	1	1	1	0	0	8	2	---	---
	TOTAL	26	6	4	3	2	1	11	9	4	4

TABLE A-2

	B	C	D	E	F	G	H	I	J	K	L
TRAFFIC		464	150	77	39	73	38	201	113	---	---
NON-TRAFFIC		421	105	65	40	46	19	217	100	---	---
TOTAL		885	255	142	79	119	57	418	213	100	104

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